



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

a vigorous and trenchant criticism of Haeckel's *Gastrula* theory, exposing its weak points. Mr. Agassiz regards the assumptions of Haeckel forming the basis of his *Gastrula* theory as "wholly unsupported." It must "take its place by the side of other physio-philosophical systems," and he denies that we have been "able to trace a mechanical cause for the genetic connection of the various branches of the animal kingdom."

ENTOMOLOGY IN ILLINOIS.¹—We have noticed previously the important entomological reports made by Mr. Riley to the state of Missouri; we now have before us a Report of about two hundred pages by the state entomologist of Illinois. It is fully illustrated by admirable drawings mostly from the pencil of Mr. Riley, and is well printed. Instead of treating directly of injurious insects, it is a treatise on the beetles of the United States, and as such will serve to prepare the way for future reports on economic entomology. The work is excellent as an introduction to a study of the beetles, which comprises some of the most injurious species, and we bespeak for it a large circulation outside of the state. We could find some fault with the general classification of the insects, but the aim of the work and successful treatment of the subject preclude such criticism. The transformations of a number of new beetles are described and figured.

POLARIZATION OF LIGHT.²—This is another of the elegant and popular treatises reprinted with additions and new plates from "Nature." They contain the substance of lectures delivered at various times to workpeople, and "constitute a talk rather than a treatise on polarized light," says the author.

BOTANY.

DO VARIETIES WEAR OUT OR TEND TO WEAR OUT?—In an interesting article on this subject in the New York "Tribune," Prof. Gray discusses this question, and concludes that "sexually propagated varieties, or races, although liable to disappear through change, need not be expected to wear out, and there is no proof that they do; also, that non-sexually propagated varieties, though

¹ Fourth Annual Report on the Noxious and Beneficial Insects of the State of Illinois. By William LeBaron, M.D. Springfield, 1874. 8vo, pp. 199.

² Polarization of Light. By William Spottiswoode, LL.D., F.R.S. Nature Series. London. Macmillan & Co. 1874. 12mo, pp. 129, with plates and cuts. Price \$1.00.

not liable to change, may theoretically be expected to wear out, but to be a very long time about it."

CYPRIPEDIUM SPECTABILE.—Last spring I found on East Mountain, Williamstown, two flowers of the *Cypripedium spectabile* Swartz, growing from the same stalk, one of which was the regular color, nearly all purple, and the other was pure white.—J. S. KINGSLEY.

ZOOLOGY.

NOTE ON STERNA LONGIPENNIS NORDMANN.—In the NATURALIST for July, 1874 (p. 433), a tern, "new to the Atlantic coast of North America," was described by me under the name of *Sterna Portlandica*—in event it should prove distinct from *S. longipennis* Nordm., with which Dr. Coues identified Mr. Lawrence's *S. Pikei* (see Key, p. 320). At that time no specimen of Nordmann's species existed, so far as known, in the United States, so that a satisfactory comparison could not be made, while the new bird did not agree well with the description of *S. Pikei* in the ninth volume of the Pacific Railroad Reports (p. 863). In order to settle the question of the relationship of *S. Portlandica*, Dr. Otto Finsch, Curator of the Bremen Museum in Germany, kindly forwarded to the Smithsonian Institution the only specimen of *S. longipennis*, a fine example, in perfect plumage, procured at the sea of Baikal, Siberia, June 3, 1870. Having thus an opportunity of actual comparison of specimens, the results are herewith given:

Sterna longipennis Nordmann is very closely related to *S. hirundo*, from which it scarcely differs more than as a geographical race, and is very distinct from both *S. Pikei* and *S. Portlandica*. The degree of relationship between the four forms is shown below:

A.—Beneath ashy white; nape pale pearl-gray; forehead black in summer; feet red. Tarsus .70 or more; culmen 1.40 or more.

Bill red, the terminal third black. Wing, 10.35; tail, 6.50; depth of fork, 3.10; culmen, 1.50; depth of bill, .30; tarsus, .80; middle toe, .68.

S. HIRUNDO.

Bill black, the upper mandible beneath the nostril and the basal two-thirds of the lower inclining to reddish. Wing, 10.35; tail, 6.30; depth of fork, 2.55; culmen, 1.50; depth of bill .30; tarsus, .75; middle toe, .68.

S. LONGIPENNIS.